

Work Order ID 127137-2

Tuesday, December 09, 2014 7:20:20 AM

SPLIT-2

127137

Ship JAN 18

Page 1

Item ID: D5134-042

Accept

N9000040100

Setup Start

NS1

Revision ID:

Item Name: Damper Support Assembly, RH

Stop

NS2

Start Date: 12/9/2014 Start Qty: 4.00

Required Date: 12/9/2014 Req'd Qty: 4.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: MJS

Date: 14-12-09 Tooling:

Date:

Run Start

NR1

QC:

Date: SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D5134	A

100

0.00

100

Bandsaw

Jeaspa Bandsaw

Memo

CUT BLANK TO 5.125" LONG

0.00

4

Ø

DAS
20
9-89

15-03-24

110

0.00

110

HAAS 1

HAAS CNC vertical machine #1

Memo

Mill as per Dwg and folio FB342

DWG REV: A

FOLIO REV: A

DEBURR

0.00

4

Ø

DAS
44
9-89

15/03/29

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			

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Page 2

Hand Finishing

Tuesday, December 09, 2014 7:20:20 AM

Page 3

Accept

Setup Start *NS1*

Stop *NS2*

Stop *NS2*

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run	Start	*NR1*
	Stop	*NR2*

[illegible]

APR 17 2015

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Tuesday, December 09, 2014 7:20:20 AM

Page 4

Customer:

Run	Start	*NR1*
	Stop	*NR2*

APR 32 2015
27

APR 3 1946

Work Order ID 127137

Tuesday, December 09, 2014 7:20:20 AM

127137

Page 5

Item ID: D5134-042 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Damper Support Assembly, RH
Start Date: 12/9/2014 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 12/9/2014 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00							
Quality Control									

MLJ 15-04-23
MLJ 15-04-24

Picklist Print

Tuesday, December 09, 2014 7:20:23 AM

Page 1

Work Order ID: 127137

127137

Parent Item: D5134-042

D5134-042

Parent Item Name: Damper Support Assembly, RH

Start Date: 12/9/2014

Required Date: 12/9/2014

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A NEW ISSUE 14-09-09 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
NAS77C6-021 *NAS77C6-021* BUSHING		Purchased	No				Each	42.0000		8			

CH 15-04-16

Location

Loc Qty

Loc Code

ST260

42

M130278

32

M131067

10

f

12.3750

2

1.750'

DAS

20

9-89

15-03-26

M7075T6B4-000X03-00

Purchased

No

M7075T6B4 000X03 000

7075-T6 BAR 4.000' X 3.000"

GRAIN RLY 3" *

Location

Loc Qty

Loc Code

MAT006

12.375

M130312

3

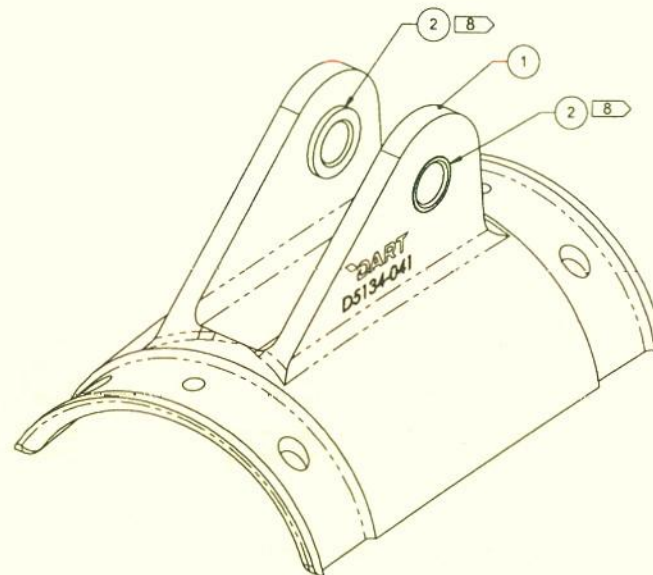
M130938

9.375

131225

1.750'

ITEM	QTY	P/N	DESCRIPTION
	X	D5134-041	DAMPER BRACKET ASSY, LH
1	1	D5134-1	DAMPER SUPPORT, LH
2	2	NAS77C6-021	BUSHING



D5134-041 DAMPER SUPPORT ASSY, LH

NOTES:

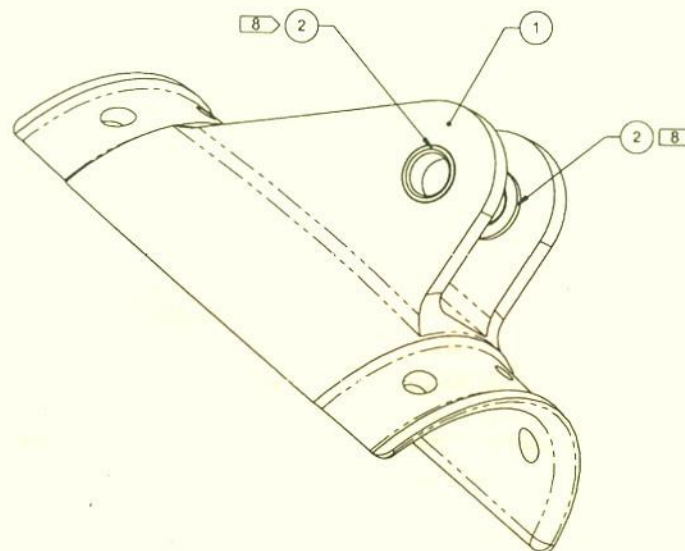
- 1) MATERIAL: N/A
- 2) FINISH: PRIME AND PAINT WHITE PER DART QSI 005 4.2
MASK OFF INNER SURFACE OF BUSHING PRIOR TO APPLICATION OF PRIME/PAINT
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.41 lbs
- 8) NAS77C6-021 BUSHINGS ARE PRESS FIT INTO D5134-1 DAMPER SUPPORT, IN ORIENTATION SHOWN

127137 MJS
14-12-09

RELEASED
2014-10-08
MP

APPROVED	A NEW ISSUE		AP	14.09.02
	REV.	DESCRIPTION	BY	DATE
	DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	AP		
	CHECKED	ML	DRAWING NO.	REV. A
	MFG. APPR.	RQ	D5134	SHEET 1 OF 4
	APPROVED	MP	TITLE	SCALE
	DE APPR.	DS	DAMPER SUPPORT ASSY	NTS
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ITEM	QTY	P/N	DESCRIPTION
	X	D5134-042	DAMPER SUPPORT ASSY, RH
1	1	D5134-2	DAMPER SUPPORT, RH
2	2	NAS77C6-021	BUSHING



D5134-042 DAMPER SUPPORT ASSY, RH

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: PRIME AND PAINT WHITE PER DART QSI 005 4.2
MASK OFF INNER SURFACE OF BUSHING PRIOR TO APPLICATION OF PRIME/PAINT
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.42 lbs
- 8) NAS77C6-021 BUSHINGS ARE PRESS FIT INTO D5134-2 DAMPER SUPPORT, IN ORIENTATION SHOWN

APPROVED

DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	ML	DRAWING NO.	REV. A
MFG. APPR.	RQ	D5134	SHEET 2 OF 4
APPROVED	MP	TITLE	SCALE
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RELEASED
2014-10-08
MD

9 Ø0.188 TOOLING HOLE
AS REQUIRED, 2 PL

9 Ø0.257 TOOLING HOLE
AS REQUIRED, 4 PL

0.893
REF

0.36
TYP

R0.063
4 PL

DART
D5134-041

GRAIN
DIRECTION

4.671
REF

0.36
4 PL
0.100
2 PL

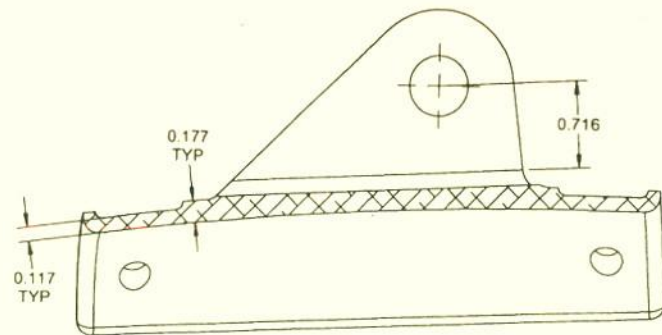
Ø0.500
+0.000
-0.001
THRU

R0.25
THIS EDGE ONLY

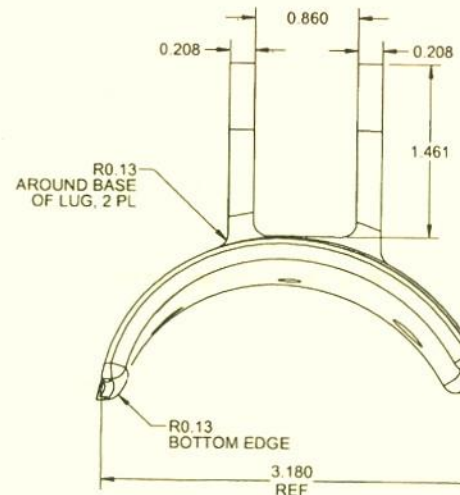
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REF

1.932



SECTION A-A



RELEASED
2014-10-08

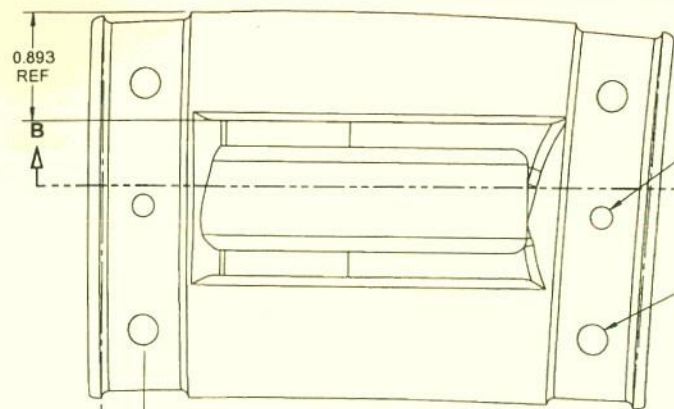
NOTES:

- 1) MATERIAL: ALUMINUM 7075-T6 (OR T651 / T6510 / T6511 / T62) ALUMINUM BAR
PER AMS-QQ-A-225/9 (OR AMS 4122 / 4123 / 4186 / 4187) OR
PER AMS-QQ-A-200/11, REF DART SPEC M7075T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART LOGO AND P/N "D5134-041" IN AREA SHOWN
USING 0.125 HIGH X 0.010-0.020 DEEP LETTERING PER DART QSI 044 6.3,
IDENTIFY WITH DART B/N PER DART QSI 044 6.1
- 7) WEIGHT: 0.38 lbs
- 8) ALL NON-DIMENSIONED FEATURES DEFINED PER DRAWING FILE "D5134-1-REVA.SLDPRT"
- 9) POSITION TOOLING HOLES AS REQUIRED WHILE MAINTAINING MINIMUM 2D EDGE DISTANCE AND 4D PITCH BETWEEN HOLES

D5134-1 DAMPER SUPPORT, LH

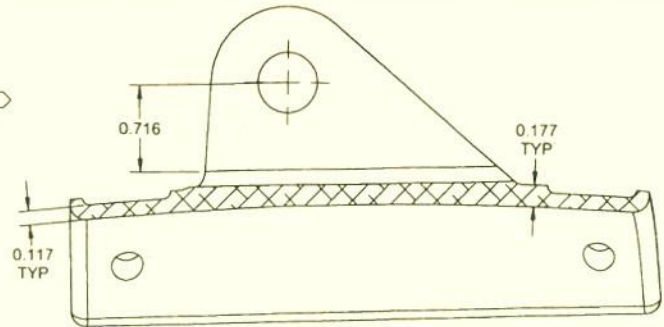
APPROVED

DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	ML	DRAWING NO.	REV. A
MFG. APPR.	RQ	D5134	SHEET 3 OF 4
APPROVED	MP	TITLE	SCALE
DE APPR.	DS	DAMPER SUPPORT ASSY	NTS
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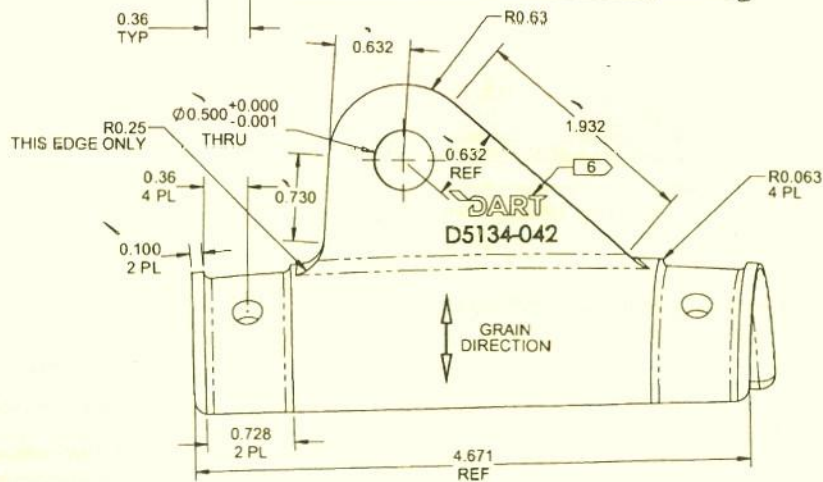


Ø0.188 TOOLING HOLE 9
AS REQUIRED, 2PL

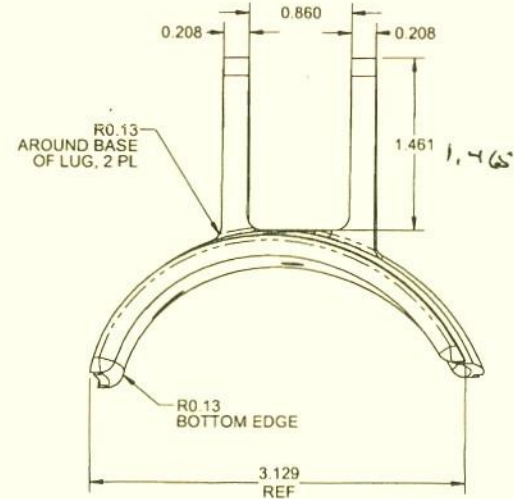
Ø0.257 TOOLING HOLE 9
AS REQUIRED, 4PL



SECTION B-B



D5134-2 DAMPER SUPPORT, RH



- NOTES:
- 1) MATERIAL: ALUMINUM 7075-T6 (OR T651 / T6510 / T6511 / T62) ALUMINUM BAR
PER AMS-QQ-A-225/9 (OR AMS 4122 / 4123 / 4186 / 4187) OR
PER AMS-QQ-A-200/1, REF DART SPEC M7075T6B
 - 2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: IDENTIFY WITH DART LOGO AND P/N "D5134-042" IN AREA SHOWN
USING 0.125 HIGH X 0.010-0.020 DEEP LETTERING PER DART QSI 044 6.3,
IDENTIFY WITH DART B/N PER DART QSI 044 6.1
 - 7) WEIGHT: 0.38 lbs
 - 8) ALL NON-DIMENSIONED FEATURES DEFINED PER DRAWING FILE "D5134-2-REVA.SLDPRT"
 - 9) POSITION TOOLING HOLES AS REQUIRED WHILE MAINTAINING MINIMUM 2D EDGE DISTANCE AND 4D PITCH BETWEEN HOLES

RELEASED
2014-10-08
mp

APPROVED	DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	AP		
	CHECKED	ML	DRAWING NO.	REV. A
	MFG. APPR.	RQ	D5134	SHEET 4 OF 4
	APPROVED	MP	TITLE	SCALE
	DE APPR.	D9	DAMPER SUPPORT ASSY	NTS
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